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MODEL SHIPS AND POWER BOATS

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Model Ships and Power Boats

INCORPORATING *Ships and Ship Models*

EDITED BY EDWARD BOWNESS

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Contents

The Ship's Log

OUR readers will notice that in our enlarged form we are incorporating our old magazine *Ships and Ship Models*. It has been impossible up to now to devote much space to descriptions of actual ships, although such material is of great value to the ship-modeller. Now that we have more space we propose to use some of it for supplying information both of the ships as a whole and of the various details to be found in a ship. Amongst other features we hope to revive the " Ship Modeller's Scrapbook " which was always both interesting and helpful. In its old form it was arranged alphabetically, but this arrangement imposes certain restrictions. We will introduce items as they occur to us, or as they are requested by our readers. In such a way the series can go on indefinitely so long as it serves a useful purpose. The accent of our magazine as a whole will, of course, still be on models rather than on ships, and power boats will always hold an important place in our outlook. In this connection we consider power boats to be not only hydroplanes and speed boats, but also models of power-driven vessels of all types. We propose also to continue our policy of reserving space for model yachts and model sailing craft of all types. Working models, whether driven by sail or other power, are perhaps the most interesting of marine models.

THE NATIONAL MARITIME MUSEUM

Those of us who are interested in historical ship models will be more than pleased to note that the Queen's House has been reopened to the public. In many ways this house is the gem of the Museum. It covers the period when ships were at their most decorative and ornate and as the House itself belongs to this period a more perfect setting for the models and picture could not be imagined. To wander through its rooms on a summer afternoon studying the beautiful pictures and models and getting occasional glimpses of the shipping on the River from the front windows is a delightful privilege for the shiplover. The Museum as a whole is developing rapidly and each time we go down there seems to be something fresh to see. The shipmodeller should on no account neglect to explore the possibilities of this Museum, nor should he fail to avail himself of the valuable services it offers him.

OUR COVER PICTURE

This month we have used a photograph we obtained recently showing the bow and head timbers of Nelson's famous flagship, H.M.S. *Victory*. This form of bow reached its perfection at the end of the eighteenth century. The beakhead bulkhead which extended across the ship between the two catheads formed a perfect starting point for the graceful lines of the head rails. These blended perfectly with the figurehead and the slope of the bowsprit. Below, the cheeks which contained the hawse holes were extended upwards into the figurehead. The uprights or head timbers opened out gracefully as they approached the shape of the rounded bow and emphasised the varying angles at which the head rails were built into the knee of the head. These are important points which must be observed when building the headwork of any ship of this period and we trust our photograph will help the modeller to appreciate their beauty and to avoid the ugly and ungraceful lines which all too often spoil this part of the model.

*MODEL MARINE POWER PLANTS

by Edgar T. Westbury

THE next form of power plant to come under consideration is the electric motor, which is extremely popular for working model ships and boats, particularly those in which a good deal of care has been devoted to detail work and finish. Constructors of such models are often quite naturally reluctant to install in them a form of plant which may be messy, or liable to impose heavy mechanical strains on the structure ; and a further objection to the use of any form of heat engine, particularly one which involves the application of a naked flame, is the risk of damage to hull and superstructure by scorching, or the still more serious danger of fire.

Electric motors are free from all these objections and may therefore be employed without scruple in the most elegant and highly finished super-detail scale models. While they share their immunity to heat or fire risk with clockwork, compressed air or bottled gas motors, they are much more suitable for continuous running at a constant speed, and their source of power is always readily available and easily applied. For most kinds of prototype craft which are not required to attain a very high speed—say not greater than scale speed—the convenience and simplicity of electric propulsion is a great practical asset.

SCALE SPEED AND SCALE PERFORMANCE

Perhaps it may be permissible at this stage to digress a little and consider what the term " scale speed " really means. It has often been the subject of heated controversy, and is very commonly confused with " scale performance," which is a different thing altogether. It can, however, be defined quite simply and logically ; speed is a measure of distance over time, and as time is a dimension which cannot be scaled, it follows that scale speed can only be assessed on a purely linear proportional basis. In other words, if a model is made to 1/100 scale, it must traverse 1/100 of a mile in the same time as the full-size prototype takes to traverse one mile, in order to attain scale speed. For instance, take the case of a 6 ft. model of a 600 ft. liner ; if the latter attains a speed of 20 knots (or 25 miles per hour) the model, running at scale speed, will attain only $\frac{25}{100}$ or $\frac{1}{4}$ mile per hour. This speed may seem absurdly low, and it is a fact that nearly all models are run at a speed well in excess of scale, for various reasons, practical or otherwise ; but estimates of the speed of models on water are notoriously erroneous, and this actual speed would not look as slow as it sounds.

Scale performance, it may be observed, is a term used to define the *efficiency* of an engine or power plant, in relation to its size, and involves consideration of cubic capacity in such components as boilers and cylinders, or surface area of heating surfaces. It is obviously a much more complicated thing to work out, entailing the application of root laws, and even so the findings are often open to question, as there are so many factors—such as solid or fluid friction, convection, flow of gases, combustion, etc. which cannot be made to conform to scale rules at all. For the purposes of this treatise it is proposed to keep to practical considerations, and leave complicated formulae to those who love " theory for theory's sake."

*Continued from February issue, page 21.

APPLICATION OF ELECTRIC MOTORS

It may be taken as an established fact that the application of electric power, to produce scale speed in the usual form of prototype model, is fully practicable and presents few problems or difficulties. The motors are small and compact, and may be installed in most forms of hulls in a convenient position to couple directly to one or more propeller shafts, either with or without the use of gearing. From the practical aspect gearing is usually unnecessary, except as a means of driving two propeller shafts from one motor, coupling independently-driven shafts together to synchronise their speed. The torque characteristics of the normal type of small motor are such that it will deliver its power over a fairly wide range or speed with little difference in mechanical efficiency, and a little experimental work in finding the best diameter and pitch or propeller to suit both the motor and the hull (the two are complementary) will enable the power to be used to the best advantage.

Geared-down propellers are, however, sometimes desirable from the aspect of realism, as, for instance, in the case of a tug, which usually has a large propeller for its size, running at a low speed ; a small, high-revving propeller would obviously be quite out of character. Some form of gearing is also clearly a necessity when an electric motor is used to drive a paddle boat ; in this case worm gearing is usually the most efficient and convenient. The worm may be attached directly to the motor shaft, and the worm wheel mounted on the paddle shaft. Gear ratios are obviously incapable of being rigidly defined, and must be worked out to suit individual cases, but generally, a worm reduction gear of not less than 30-1 is desirable for driving paddle wheels, and a single stage spur gearing of anything from 2-1 to 8-1 for slow-speed screw propellers.

BATTERIES

Electric motors may be supplied with current by means of either primary or secondary batteries, the former being most convenient for occasional

use and low in initial cost, but lower in efficiency and more expensive in the long run than secondary batteries. The form of primary battery almost exclusively employed nowadays is the dry battery, and although there are distinct possibilities in some forms of wet batteries (such as the bichromatic cell, which is capable of a high output in relation to its size and weight), these are generally too messy and troublesome in use to appeal to modern users. Secondary batteries, or accumulators, may also be obtained in either dry or wet types, the latter being generally preferred, and being capable of production in more or less unspillable form, are free from most of the objections generally associated with wet batteries.

when the motor is required to run under a heavy load, for several minutes at a time. The use of large capacity long-life batteries is always a sound policy, in cases where the weight and bulk can be tolerated—and here it may be mentioned that battery weight is often useful in a boat to serve as ballast, especially if it can be moved as required to adjust trim.

Although the term " dry " battery is not strictly correct as regards the internal constitutents, which could not function in a perfectly dehydrated state, it is most important that they should be protected from damp as much as possible, as damp reduces their working life by causing external leakage and possibly wasting by chemical action. Batteries should never be left in the boat when not in use, and although

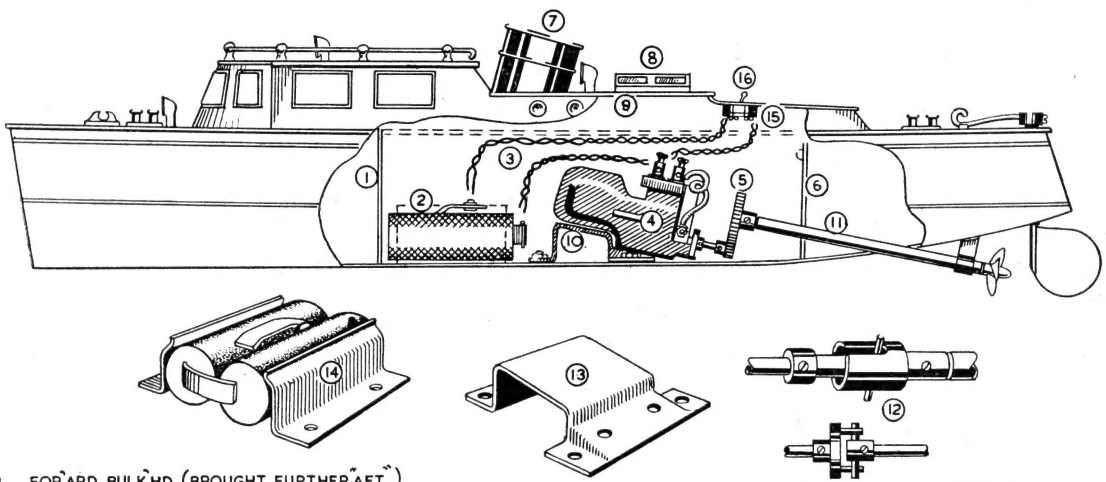


Diagram showing the arrangement of motor, batteries and transmission gear of an electrically-driven model launch.

Dry batteries being obtainable in a wide variety of sizes and shapes, users are often tempted to use the smallest, lightest and cheapest which will supply the appropriate voltage, but this is a mistaken policy, unless one is content with quite short runs and a brief life. Nearly all primary batteries, and dry batteries in particular, are subject to variation of voltage, according to the amount of current they are called upon to deliver in relation to their size ; and obviously a small battery will suffer a larger voltage drop for a given current output than one of large size, quite apart from the fact that its ultimate capacity must inevitably be exhausted much sooner. Small electric motors are often advertised as being suitable for running from pocket torch batteries—and so they are, superficially, at least, as is often demonstrated by the salesman, by applying the tabs of a battery to the motor terminals, when it hums merrily away. But such a test, though often convincing, is by no means a proof of what will happen

it is desirable to fit them as low in the boat as possible, they should never remain awash in bilge water any longer than can be helped.

Accumulators are not subject to voltage drop to anything like the same extent as dry batteries, except when they are nearly run down, and they can be discharged at very much higher rates for a given size of cell. At the same time, however, there is a definite limit to the rate of discharge, usually determined by the active plate area or ampere-hour capacity ; generally speaking, either charging or discharging current should not exceed one-tenth of total capacity, if the maximum battery life is to be obtained. That is to say, a cell of 10 ampere hours capacity should not be discharged at a greater rate than 1 ampere. A short-circuit on an accumulator not only drains its capacity abnormally, but is also liable to damage the plates by violent chemical action.

These rules apply generally to the lead-acid type

of cell, which is by far the most popular in all sizes, though suitable sizes and types for use in model boats are not so readily available as they were before the war. The small cells for radio work are not very suitable for boat work, being usually large and heavy for their capacity, though they are often applied with a fair degree of success. Lead-acid batteries of all types produce 2 volts per cell, which, in view of the fact that full voltage is maintained during normal discharge, means that two cells will produce as much *effective* voltage as three dry cells, or sometimes more, a fact which often offsets the disadvantage of their greater weight.

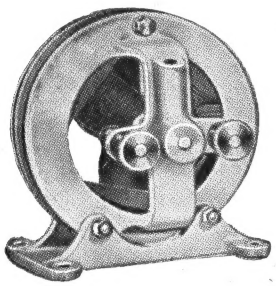
These batteries require careful attention to keep them in good condition. They should be fully charged and the electrolyte kept up to prescribed working strength. Spillage must be made good with fresh acid, and evaporation by distilled water. On no account must foreign matter, including pond water, be allowed to enter the cells, and if the boat gets swamped or sunk, the battery should be emptied as soon as possible and rinsed with distilled water before refilling with new acid. They should never be stored in a discharged condition, and if they are likely to be out of action for any length of time, it is best to charge them fully and then drain out the acid. Incidentally, the methods of the usual battery service station are notoriously rough on tiny accumulators, and it is a sound policy to charge them at home, where they can be given individual attention, using a small trickle charger, or a larger battery of slightly higher voltage, with a lamp or other form of resistance to regulate the flow of current to an amount not greater than the maximum prescribed charging rate. The positive side of the charging current supply should be connected to the positive side of the battery.

The greatest enemy of the small lead-acid cell is a parasitic chemical action, including " creeping," with corrosion of external electrodes and terminals, and formation of lead sulphate on the plates. Often a battery which has been neglected for several weeks, is found to be so badly sulphated that the plates are internally short-circuited, and corroded so that the electrodes fall to pieces or the terminals seize up. Many cures have been suggested for sulphated plates, but from long experience, I suggest that the only really effective remedy is to throw the battery away and get a new one—and, prevention being better than cure, don't let it happen again !

The alkaline type of accumulator is immune from many of the troubles inherent in the lead-acid type, as it cannot sulphate, it is mechanically more robust, can be short-circuited with impunity, and stored for practically any length of time without deterioration. The cells can be completely sealed to prevent spilling, except during and just after charging, when some gassing occurs ; and rapid charge or discharge is possible in an emergency. Thus a small-capacity battery may be used in a boat, and should it become completely discharged after a short run, it can be recharged in a matter of minutes at the pondside by connecting it to a car battery, though this method is liable to waste the electrolyte by ebullition. Alkaline batteries are lighter, but more bulky, than lead-acid batteries for a given useful capacity.

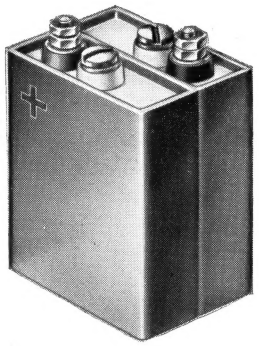
The disadvantages of this form of accumulator are firstly its lower voltage per cell—1.25 volts as against 2 volts for the lead-acid cell, and 1.5 volts for the dry cell—and secondly, its higher initial cost, which may be more than twice as much as the lead-acid type ; but my opinion is that it is well worth it, on the ground of longer life alone. The best-known type of alkaline battery in this country is the nickel-cadinium type made by Nife Batteries Ltd., Redditch, which is made in very small sizes, including the DW 13 twin-cell metal-clad unit which weighs only 6 oz. ; comparable with dry cells, and much lighter than the smallest practical lead-acid battery available. Another alkaline battery of the silver-cadinium type has recently been introduced by Messrs. Venner Time Switches Ltd., Kingston-on-Thames. Alkaline batteries merit the serious consideration of all who wish to exploit the electrical propulsion of models to the utmost advantage.

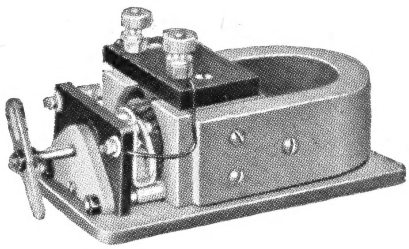
(To be continued)



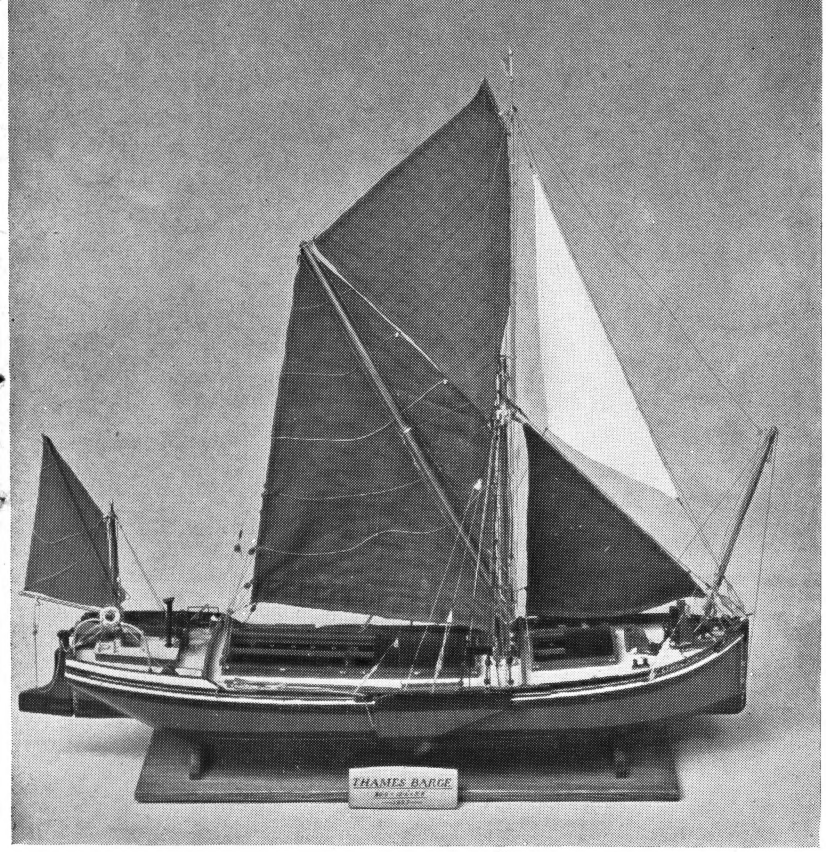
The S.T. permanent-magnet motor (Stuart Turner, Ltd.)

The Nife DW13 twin-cell alkaline accumulator





The " Permag " motor (Bassett - Lowke, Ltd.)



OLD-TIME COASTAL CRAFT: 8

The Thames Barge

by L. H. Foster

WHETHER the appeal is due to the sight of them passage-making with a stout wind in the open waters of the outer Estuary, or interest in the evolution of form and rig which has made them the efficient and ubiquitous common carriers under sail they are, few vessels compel greater admiration than the sailing barges of the Thames.

Thirty or forty years ago (more than they can in their diminishing numbers today), they dominated the river scene ; above bridge under jury rig with masts lowered, or threading the traffic under canvas in the crowded dockland reaches.

From any point between the North Foreland and Languard numbers were sure to be seen making their way up or down the channels, some perhaps, bound by an open sea passage to a Continental port ; others to a destination at the head of a shallow intricate creek of an Essex river where they will dry out before half ebb.

Manned by two men they carry 150 tons or more on voyages requiring these diverse qualities. Their crews are expert sailormen, with profound local knowledge, and masters of the art of working the tide.

With their long shapely hulls and great reddish brown sails they make an impressive picture, a fit subject for the marine artist and writer.

Pre-eminent among the former is the work of the late W. L. Wyllie, R.A., and among the latter Carr's *Sailing Barges*, Martin's *Sailorman*, and *Ionides' Floating Home*, recount the history, details, and work of the barges, and the life and philosophy of their captains and mates with intimate knowledge and understanding. Edgar J. March's recent book, *The Sailing Barges of the Thames and Medway* is, however, the best and fullest record of them.

The book is invaluable from whatever standpoint interest in the sailing barges arises, and not least to the builder of accurate and complete models.

In 1867 there were some 8,000 of them ; in 1938, 800. In recent years some have been cut down and fitted with auxiliary engines.

Ethel Ada, the subject of the model, is one of the fleet owned by Messrs. Francis & Gilders, of Colchester, and is considered by her owners to be a good representative barge. She was built at Ipswich in 1897, and measures 80 ft. × 19 ft. 6 in. × 5 ft. 8 in.

The model, which is built to the scale of 1 : 48 ($\frac{1}{4}$ in. to ft.), was planked on a " bread and butter " core, the thickness of inside hold ceiling to outside framing. The winches, which are working models, needed hard as well as soft-soldering to build up progressively. The problem of gearing was solved by the village watchmaker handing over his stock of hundreds of little assorted wheels from which to select suitable sizes. The steering shaft is threaded 8-B.A. as that is the smallest size in which both right- and left-hand taps and dies can be obtained. The wheel is a Bassett-Lowke fitting. Wire rigging was laid up to suit, running gear is surgical silk.

A casual inspection of a barge gives the impression of only a handful of blocks. When it comes to making them there are just under a hundred, mostly iron.

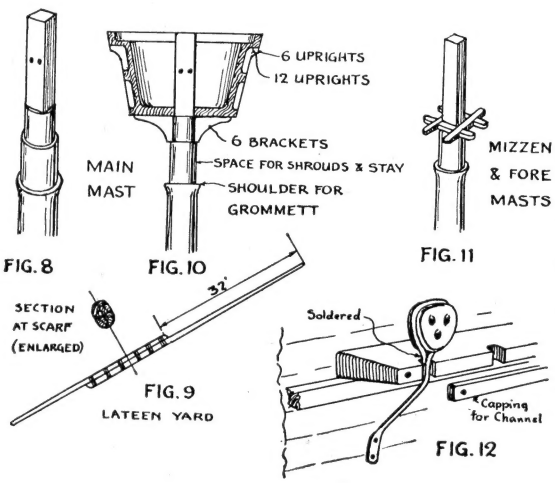
The model was made by Mr. L. H. Foster, of Kelvedon, Essex, from drawings made while *Ethel Ada* was refitting at her owner's yard and lying at the Hythe between voyages.

A Model Flemish Carrack

The late C. M. MILLWARD'S *series continued by the Editor*

NOW that the hull is complete we must next consider the masts and spars. The main mast can be made of any suitable straight-grained wood. Dowel rod is often recommended but as it is usually machined from sawn wood, the grain is not always true with the line of the dowel, and masts made of it are liable to break. Personally, I prefer to split a piece of white or red pine—yellow pine is, of course, the best of all, but is not often obtainable—and having got a straight piece, to shape it from that. The author of the first part of this series gave, reasonably enough, no dimensions for this model, merely indicating by dimensions or diagrams the size of the various parts of the original ship, leaving the constructor to decide on his own scale. We propose to continue on similar lines. The main mast is approx. 90 ft. from main deck to the base of the fighting top. Allowance should be made for the portion below the deck, plus an additional 7 ft. for the length of the masthead. The diameter of the mast at the deck is approx. 3 ft. and under the cap 27 in. The mast head is squared and the fighting top rests on the shoulder formed by squaring the mast. Below the top six angular brackets are fixed to the mast to give further support to the top. Below these there is a slight shoulder which takes the grommett on which the shrouds rest. See Fig. 8. The mast would be built of several timbers, and thus it is woolded at intervals throughout its length, each alternate woolding being more than twice as wide as the others.

The fore and mizzen masts are made from single poles and thus no woolding is necessary. The foremast is 55 ft. from forecastle head to the fighting top, plus 6 ft. for the masthead and an allowance for stepping it in the hull. The mizzen mast is 42 ft. from poop deck to the fighting top, plus 6 ft. from the masthead and the usual allowance for a step. The foremast tapers from 18 in. to 15 in. diameter and the mizzen is the same. In each case the masthead is squared to take the top which rests on small trestletrees at the base of the squared masthead. A flagpole about 30 ft. long by 7 in. diameter is lashed to the head of the foremast. The bowsprit is approx 45 ft. long measuring from where it enters the fo'c'sle head, and its diameter tapers from 16 in. to 12 in. The mainyard is formed of two pieces scarfed together, the length of the scarf being about 45 ft. The overall length of the yard is approx. 80 ft. At its centre it measured 24 in. by 18 in. over the scarf, tapering to 12 in. diameter at each end. The foreyard is 45 ft. long and is made in one piece. The diameter at the slings is about 15 in. tapering to 10 in. at each end. The lateen yard measures 70 ft. long overall and has a scarf approx. 20 ft. long located as shown in Fig. 9. It measures 21 in. by 15 in. over the scarf and tapers to 10 in. diameter at each end. The main top is approx. 9 ft. diameter at the base and 13 ft. at the rim. The depth is about 7 ft. The fore and mizzen tops are 7 ft. and 10 ft. in diameter by 6 ft. deep. For the model they should be turned from the solid. The three rings can be turned in position and the uprights added later as shown in Fig. 10. The fore and mizzen tops have twelve uprights each while the main top has eighteen, every third one having a curved top to support the ring as shown in the drawing. A round hole should be made in the base when turning, and then squared later to fit the particular masthead to which it belongs.



In the description of this model in the Science Museum Catalogue it states that the model is based on the well-known print of a Flemish Carrack by the Flemish master "W.A.," and makes the comment that in the drawing the hull has been shown too deep for its length, the waterline is too low, the number of shrouds on the mainmast has been exaggerated, as also has the importance of the five skids on the sides. These points have been reproduced to some extent in the model, which is a reasonably faithful copy of the print. Mr. Millward was probably in agreement with the opinions expressed in the catalogue, at least with respect to the number of shrouds on the mainmast. The print shows ten in each channel and an additional four forward of the channel and four aft, making a total of eighteen shrouds per side. Mr. Millward arranged for six shrouds in each channel, so if we follow his lead we might add another two forward and two aft of the channels making ten on each side, which would seem more reasonable. Of course, if the model is to be a

large one, the builder might prefer to have the full number of shrouds, but if the model is small, to reduce the number of shrouds would be a very welcome simplification, especially as it makes the ship somewhat more seamanlike. Having made up our minds on this point, we can now proceed to step the masts. Before doing so we must drill a couple of holes in each masthead about half way in the squared portion and in a fore and aft direction. See Fig. 8. These are for the halliards which will be fitted later. A grommett should be made for each mast to fit tightly around the circular portion of the mast below the masthead, and to rest on the shoulder provided for it.

The mizzen mast should be stepped first as the shrouds are inboard of those for the mainmast. The lower deadeyes are fixed to the rail of the bulwarks of the poop. In Mr. Morton Nance's model these are of a rather elementary form, but personally I consider they should be of the usual heart-shaped form as used for the shrouds of the other masts. There are six on each side, spaced from the transom to the after end of the main channels. There are four guns on each side on the after end of the poop deck and these should be placed in positon between the uprights for supporting the aftercastle, before proceeding with the shrouds. The shrouds are made in the usual way with a loop seized at the centre and a deadeye seized at each end. The difference in length due to the varying angle should, of course, be allowed for when fixing the deadeyes in the ends of the shrouds. In making the loop, care should be taken to keep it as small as possible as otherwise it may slip over the grommet. When a shroud rests

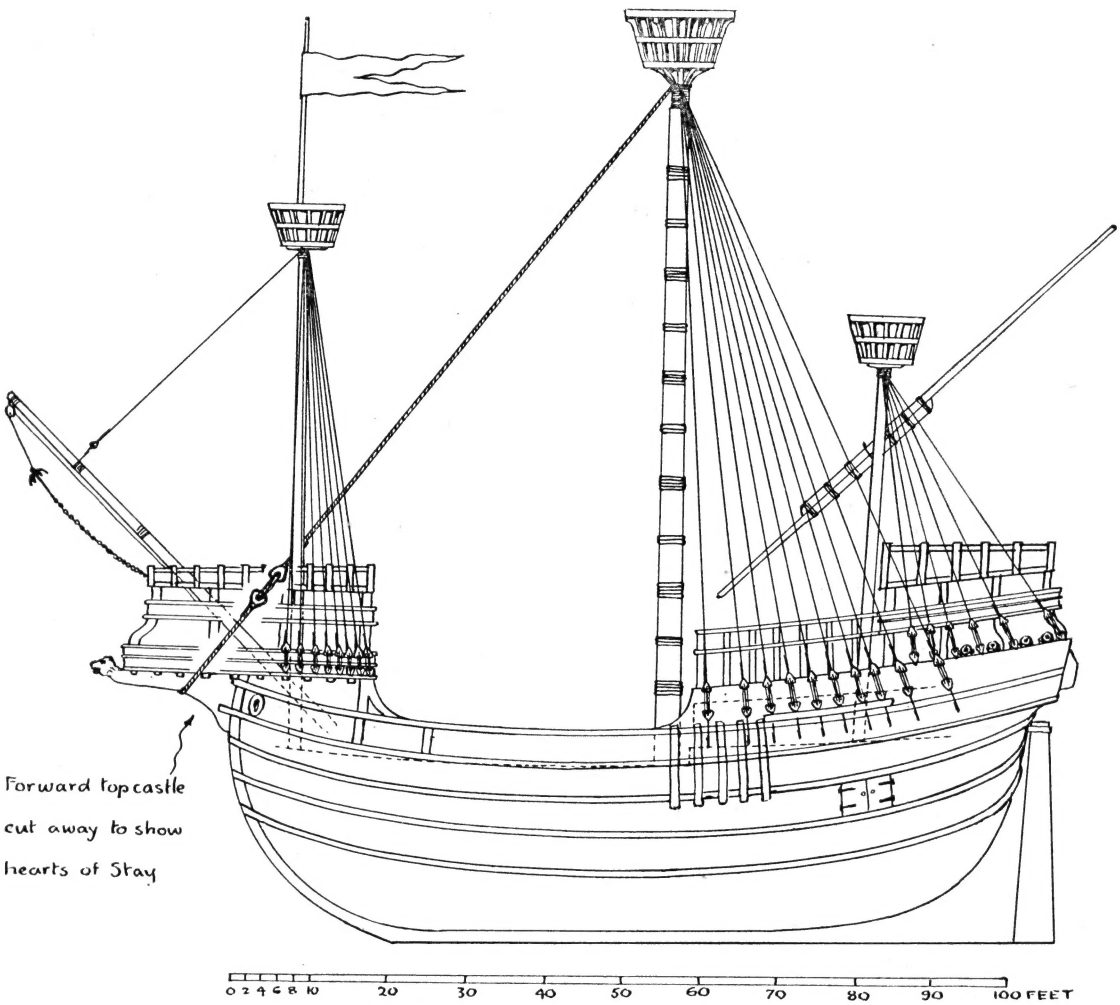


FIG. 13, DIAGRAM OF STANDING RIGGING

on bolsters on the trestletrees, as in the later ships, this difficulty does not arise. The shrouds should be fitted in the usual manner, i.e. first pair on the starboard side, the next on the port side, and so on, working from forward aft. There appears to be no forestay on the mizzen mast of this ship so apparently the pull of the shrouds is taken by the step at the foot of the mast.

The main mast should now be taken in hand. The deadeyes in the channels should be held in a wire loop, the end where it meets the main wire being secured with a spot of solder as shown in Fig. 12. The lower end of the wire should be flattened and drilled and then secured to the ship's side by means of two panel pins. The remaining four deadeyes are anchored to the ship's side just below the upper wale, the wire being bent to suit. Care must be taken to pin them at the correct angle so that the shroud is in alignment with the wire or "chain." The shrouds will be somewhat thicker than those for the fore and mizzen masts. Great care should be taken in arranging the length of each shroud to ensure that the upper deadeye is at the same distance from the lower in each case. The difference becomes more noticeable as one works aft owing to the increasing inclination of the shrouds. They must bethread ed over the masthead in the correct order as already explained for the mizzen mast.

The mainstay should now be fitted. A loop to fit the mast is spliced at the upper end and a heart seized in its lower end. In Mr. Morton Nance's model the lanyard which is run through this heart is carried down to and around the stemhead, but I would prefer to see a bridle made of a piece of stout rope spliced loosely around the stemhead and a heart seized into the free end above the stemhead. The bridge should be long enough to allow this heart to come just above the level of the floor of the forward topcastle so that both hearts would be accessible when the lanyard between them is being rove. The mainstay on the actual ship would be about 12 in. circumference or 4 in. diameter, and care should be taken to use a piece of cord of scale diameter in the model.

The foremast should now be stepped, the procedure being the same as for the main and mizzen masts. Eight shrouds are fitted on either side, the lower deadeyes being secured to rings on the lower edge of the forecastle bulwark. In stepping the foremast, the mainstay should be kept on the starboard side. In the actual ship there would be a certain amount of chafing between the mainstay and the foremast and it is possible a piece of leather was interposed to take the wear.

The bowsprit should be fitted next. There is a short squared portion at the keel, and this should be fitted in the step already provided, as shown in Fig. 4. Three sets of woolding should be bound around the bowsprit in the positions shown in the rigging diagram, Fig. 13. From the photograph of the model on the front cover of our January issue, it will be noticed that the bowsprit passes just under one of the supports for the topcastle. It must be securely lashed to this to assist the tenon at the keel in steadying the bowsprit. The stay from the head of the foremast supports the bowsprit rather than acts as a stay for the mast, and also takes the weight of the anchor. This stay should have a loop spliced at its upper end to fit over the mast and a heart seized in it at its lower end. The heart is then hauled down to the bowsprit by a lanyard above the central woolding.

(*To be continued*)

FOR THE BOOKSHELF

THE MODEL BOAT BOOK

By G. H. Deason

Published by The Drysdale Press, Stanbridge, Beds. Price 7s. 6d.

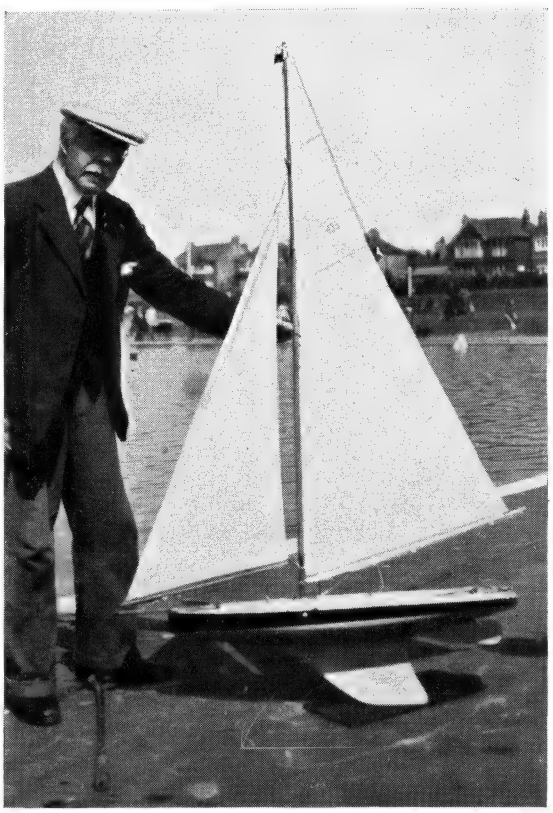
In its 128 pages this book contains a mass of information of considerable interest and value to the beginner in ship modelling and some of its chapters will be helpful to the more advanced worker. Many types of sailing and power-driven craft are dealt with, particularly the smaller and less ambitious ones. But it is interesting to note that in no case is the hull of the model carved from the solid block, the smallest of the sailing models, a 13 in. sailing Sharpie, being built of three-ply on frames. Practically every method of building a hull is described, although somewhat briefly, including hard chine hulls built of ply on frames, hulls planked in the ordinary way, hulls planked diagonally, and even the *papier-mache* hull and a rather unusual hull built of strips of balsa. Metal hulls are not mentioned.

An interesting chapter deals with the popular "M" class yacht, but the design shown fails to represent the latest practice in that its L.W.L. is only 39 in. More recent designs show a much longer L.W.L., some designers using practically the whole length of the boat. The river cruiser *Dubarry* is a nice model, and the series of models based on the M.T.B.'s and similar modern naval craft is worthy of note. The various types of power units, i.e., elastic, clockwork, petrol, diesel, steam, electric, and jet are briefly commented on in connection with the various models. The model galleon, however, contains a number of glaring errors which could easily have been avoided without affecting its value as a decoration. The shape of the stemhead is incorrect as also is the curious overhang of the poop, and the lateen yard should not have been carried from the mizzen topmast.

The book concludes with designs for an oscillating and a piston valve engine and a final chapter on electric and diesel installations. It is well produced on art paper and the illustrations are clear and interesting. The models described are taken from the series of designs issued by the publishers, and in each case one of the sheets is reproduced to a reduced scale. Certainly an interesting book.

F. C. TANSLEY'S *SKYLARK*

IN our occasional visits to the Hove Lagoon last summer we were greatly impressed with the performance of some of the 36 in. restricted class yachts. One in particular, the *Skylark*, caught our eye for its speed and its habit of planing on the water when heeled. On discussing the design with the owner, Mr. F. C. Tansley, the Commodore of the Hove Club and until recently the chairman of the Model Yachting Association, he very sportingly expressed his willingness to let us have her lines and sail plan. The article which follows is the outcome of this discussion. *Skylark* is designed to get the utmost out of the rules for the 36 in. restricted class, and while her straight ends and lack of sheer may not be everyone's ideal, she can certainly sail. As a racing machine in strong steady winds it would be hard to find her equal. Her section is almost that of a sharpie and when reaching or heeled to a suitable angle she seems to lift herself forward and to plane her afterbody. Perhaps the long luff on her foresail helps to give this lifting effect. We have reproduced the body plan full size so that builders may trace their templates direct. The sections of the keel may be obtained from the sheer plan. The design is one which we can confidently recommend to any of our readers who wish to win races in this popular class. [Editor.]



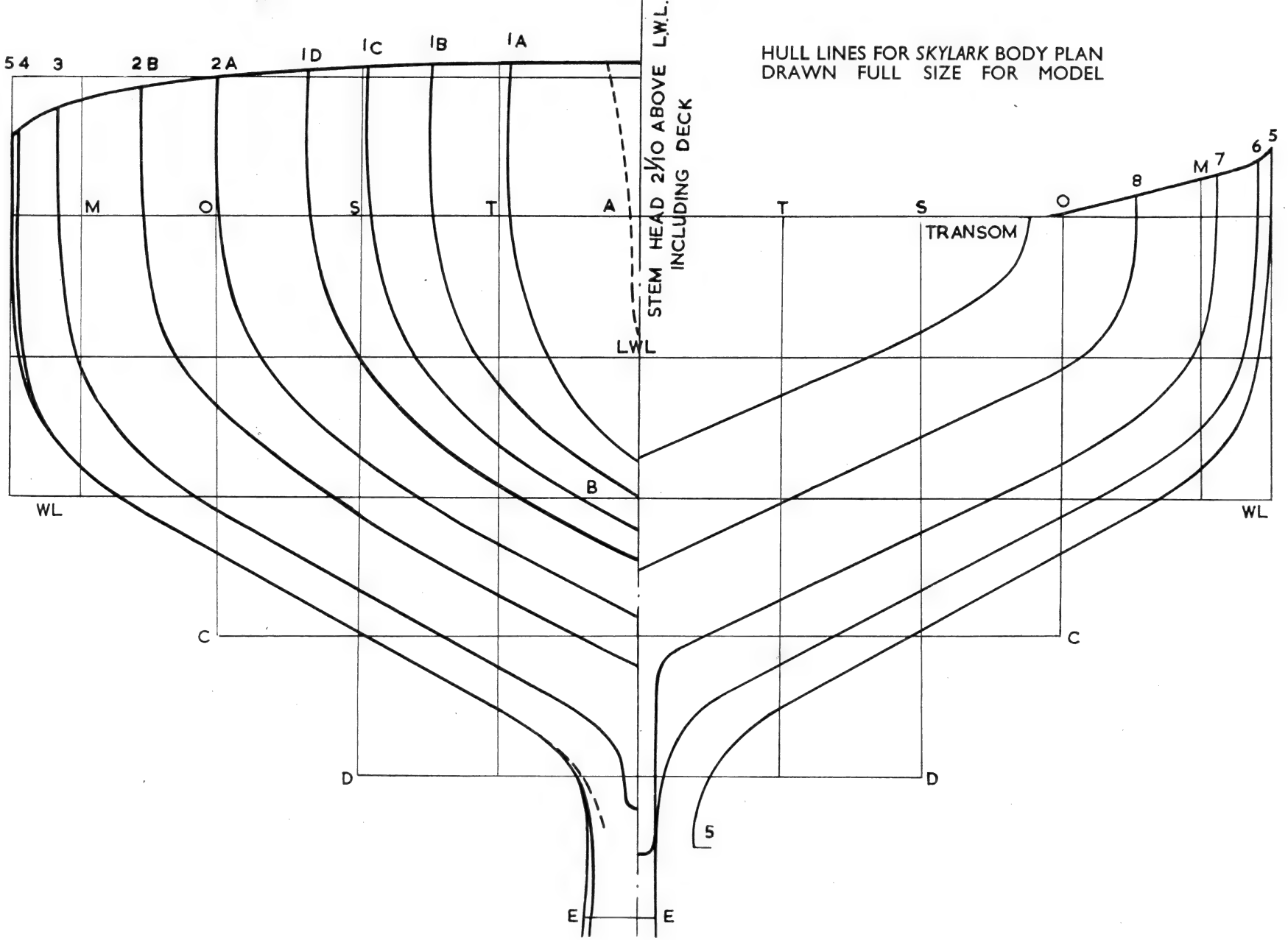
The author with his model

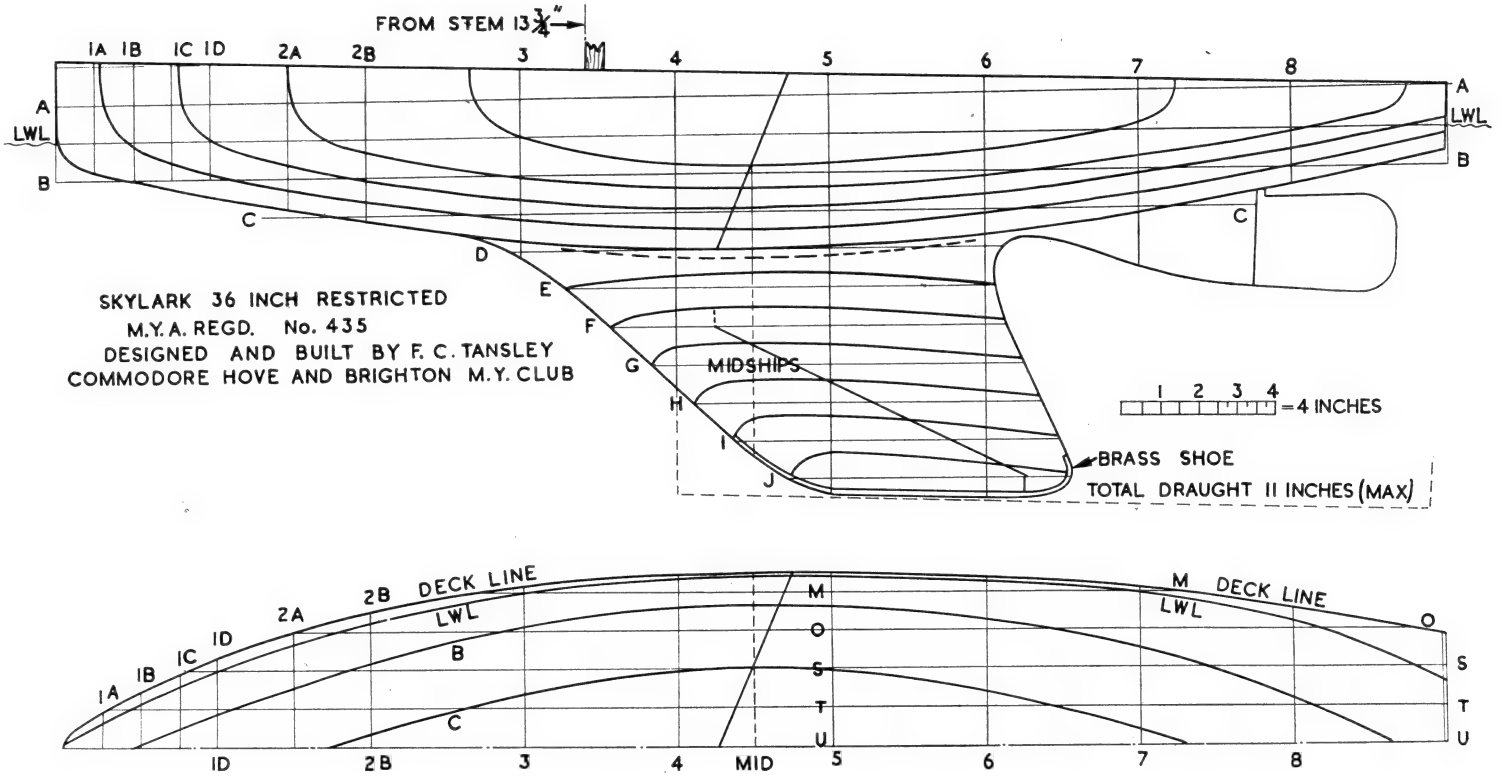
Skylark, 36 in. (restricted) class. M.Y.A. Regd. No. 435, May, 1939. In her first year she was first in three inter-club races at Hove versus Guildford, Littlehampton, and Blackheath ; thrice first in local club fixtures ; and Hove Club champion 1939. Since the war she has been twice winner, in 1948 and in 1949, of the Premier Cinque Port Cup at Hastings, and is again club champion at Hove after a series of races in 1949.

Skylark was designed for racing, and has proved very speedy—especially on the reach and running when she has an easy habit of planing. Her stopwatch times for the 695 ft. length of the Hove Lagoon have averaged 2 min. 33 sec. on the run and broad reach.

The boat was cut out in bread-and-butter fashion, and the entire construction with sail-making took 300 hours. The main portion of the hull downward from the waterline was a 2 in. piece of red cedar, above this were two 1 in. planks of white pine. The lead, brass shoe, and fastenings, weigh 6 lb. 12 oz. Total weight is now 11 lb. 14 oz., including a specially large fair weather suit 1,000 sq. in. Stout construction and spars were considered necessary to meet hard usage at Hove Lagoon.

Hull. The boat should be carefully brought to the " Box " limitations of the rule—viz. : 36 in. length overall ; beam 9 in. ; depth 11 in. A covering board or rail not to exceed $\frac{1}{8}$ in. above the highest point of the deck line is allowed. On the present boat there is no rail and the sheer is quite straight. The transom is 1 in. above water, and 7/10 in. under water—it should on no account be farther immersed. Allow a safe margin on the " Box " limits, say 1/10 in.—remembering that models, like sportsmen, grow a little larger and weightier with age. Finish to design by applying cardboard shapes or moulds every 4 in. as shown : do not cut the sections exactly one by one in succession but rather work two or three moulds in unison gradually. At the last stages take long sweeps with a small plane set very fine, and follow with sandpaper (which I hold down with the pliable peak of an old cap or felt sole). Finally, when the moulds fit well, say " blow " to the designer, and trust to your eye and commonsense to


HULL LINES FOR SKYLARK BODY PLAN
DRAWN FULL SIZE FOR MODEL
5 4 3 2B 2A 1D 1C 1B 1A
STEM HEAD 2 1/10 ABOVE L.W.L.
INCLUDING DECK
M O S T A T S O 8 M 7 6 5
TRANSOM
LWL
B
WL
WL
C
C
D
D
5
E
E

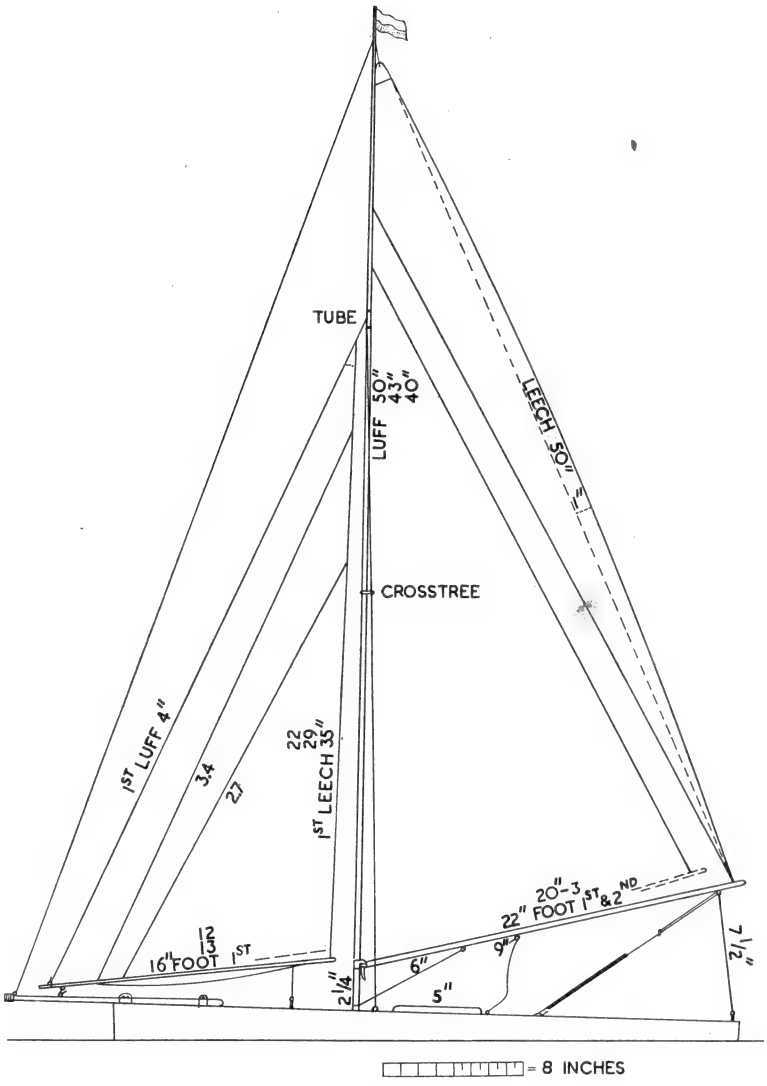


Hull lines for Skylark: *Sheer plan above, and waterlines plan below. The thickness of the keel at stations* 4, 5 *and* 6 *on waterlines E, F, G, H, I and J may be obtained from the sheer plan above, using the scale on the right hand side. Templates for shaping the hull may be traced direct from the full-sized body plan on the preceding page.*

make all curves and the finish sweet and comely—especially in the garboards and along the fin.

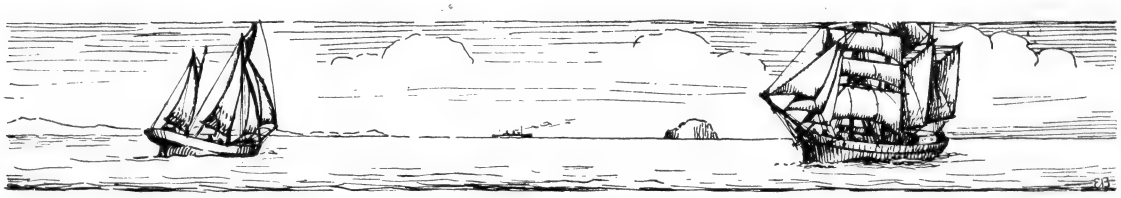
Keel and Fin. Use an ample quantity of lead, not less than 8 lb. for this boat. I make a mould for the metal from two thick pieces of wood by hollowing-out from either side depressions rather deeper than the exact dimensions ; next, screwing the opposite sides together with white lead between the joints, first placing two wooden dowel pins vertically in central alignment to form holes for cycle spokes, or screws as in the case of *Skylark*. Melt the lead in a small iron saucepan—it will come out to rough shape only, but can easily be trimmed down by spokeshave or rasp. When shaping the streamlines of the fin and lead do so by working horizontally, and also downwards from the garboards so that the slight bulb of lead remains as low as possible at the midship line. Do not hurry adjustments or painting of lead until after sailing and weighing trials, as racing 36's need careful tests for final trim.

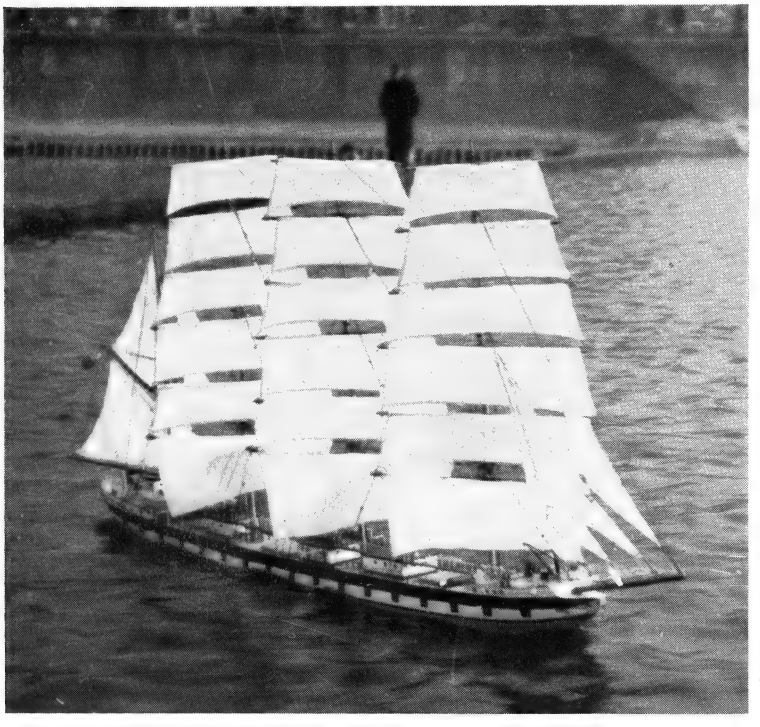
Sails. Working suits Nos. 1, 2, and 3 are shown. An extra zephyr suit can be used—luff 56 in., boom 25 in. The after leeches of No. 1 and the larger suit are rounded ; all other sails are cut with straight edges to save the nuisance of battens. The spars are solid ; the lower mast has an aluminium ½ in. tube at height of No. 1 jib hoist, and the light topmasts are left laced to the mainsails in readiness.



Sail plan for Skylark

Skylark likes being driven hard, and can take large spinnakers without running under ; she is docile under all conditions. Her lines are of the olden type —like those of the schooner *America*, the Polperro flyer, and many such with flat floors and long straight run. She has been a favourite with me for years, and I hope will prove the same to others.





OUR READERS' MODELS No. 1

A Sailing Model Four-Mast Barque

by W. H. Smith

THE EDITOR

DEAR SIR: I enclose as promised photographs and negatives of my four-mast barque under full sail. Here are a few details, as requested :—

The lines and hull details are from your articles on building an exhibition model of *Archibald Russell* which appeared in *The Model Engineer* about 1945.* I decided to treble the scale, which resulted in a $\frac{3}{16}$ in.-1 ft. model. Timber was almost unobtainable when I commenced work (May, 1948) but luckily I was presented with one side of a wooden bedstead by a friend. This piece of wood was birch, and measured about 6 ft. 6 in. × $4\frac{1}{2}$ in. × 2 in. I got a joiner to rip it into rough planks of about $1\frac{1}{4}$ in. × $\frac{1}{8}$ in., on his circular saw, and planed them down myself by hand. Instead of ribs I used bulkheads, 4 in. distant from each other, made of plywood, with the insides cut out with a fret saw. The keel was made from an odd piece of wood (deal) which happened to be long enough. The sternpost is a piece of plywood 4 in. wide screwed at right angles to the aftermost bulkhead. The counter is a block of wood screwed to the top of the sternpost and to the bulkhead projecting slightly, of course, to correspond with the planking. There is no block at the bows. The stem is another piece of ply, similar to the sternpost in construction. My method of planking was from keel to bilges, then downwards from sheer strakes, the last two planks to be fitted being at the bilges. At the time of building brass panel pins were unobtainable, so cobblers' brass pins with the heads cut off were used to pin the planks. Two brass threaded rods were fitted vertically to the bottom of the keel. The false keel consisted of 45 lb. of lead bolted to a piece of oak 3 in. × 1 in. × 24 in. Two holes are drilled through each end of the oak, and it is slipped on the brass rods and bolted. The deck is of plywood as are the deckhouses, poop and fo'c'sle decks, etc. Fife rails are made of match sticks, surmounted by thin strips of wood. The deckhouses are fitted with hand rails—fine brass wire

Hull of model before laying the decks

* *These articles have now been embodied in a book* Modelling the Archibald Russell (*Percival Marshall 5s. net.*)

The model Archibald Russell *in her element*

secured to the walls with household pins. Steering is by tiller and rack (concealed under helmsman's shelter) until a more efficient method can be thought of. Masts and spars are of dowelling of correct diameters and tapers. Each mast is fitted to the deck by means of a brass bracket with a removable pin, so that they may be unshipped if desired. All shrouds and stays may be unhooked, and the tension varied by small home-made wire bowsies. Although the ship is kept permanently rigged, it is possible to dismantle the rigging if necessary, but though this could be accomplished fairly quickly, it would no doubt take an hour or so to set up the rigging again.

As I couldn't get hold of the necessary back numbers of *The Model Engineer* for the rigging details, I bought the rigging plans drawn by Harold Underhill, I have included all the shrouds and forestays, but omitted a few of the backstays, leaving enough to ensure realism. All the braces are included, but those for the lower yards have been simplified somewhat. Each brace is taken down to the deck at the bulwarks, and then it crosses the deck to the other side of the ship, then up to the other yardarm. Although this seems a complicated business, all the sails can be trimmed in a few minutes (three minutes is the average time taken). Reefing is out of the question, so the sails are hooked to stainless steel wire back-stays. Staysails hook on to their respective stays. All braces hook to the yardarms, so do lifts, etc. Yards are fitted to brass wire parrels, which are removable or in the case of the lower topsail and lower t'gallant yards, to the caps. The lower yards are fitted to the masts by means of wire trusses and short chains, as in full size practice. All yards are removable. Capstans were turned from duralumin. Portholes are shoe eyelets—luckily they happened to be the right size. Rigging blocks are made from an old tooth brush handle Anchors haven't been made yet. Boats are from balsa. Davits are wire. The only bought fittings are the poop and fo'c'sle railings and the ventilators. The hull is 58 in. in length, 8 in. beam, and the overall length is 66 in. The scroll at the bows is made of seccotine, afterwards painted gold. Height of masts 30 in. above deck. Lower yards 16 in. I have kept strictly to scale in everything except the addition of the false keel. I accidently broke the first bowsprit, so replaced it with one made from mild steel.

Afterthought :—The model stands up to her canvas in a stiff breeze extremely well—I haven't had any need to shorten sail yet, so I intend taking a little weight off the false keel. This should also increase her speed. Yours faithfully,

W. H. SMITH.

The Shipmodeller's Scrapbook

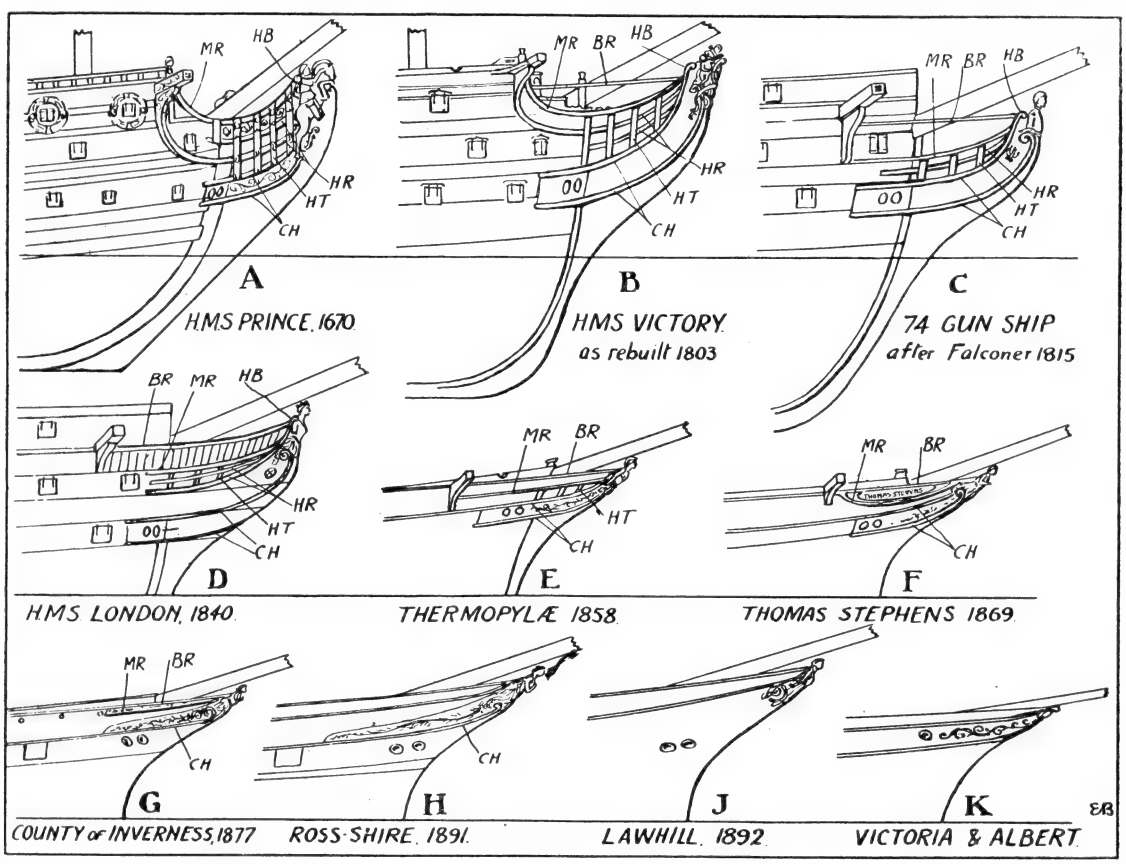
We commence this series with an article extracted from The Model Engineer *for October 14th, 1943. In view of the importance of this subject and the possibility that many of our readers may have missed it when it appeared originally, we consider that ship modellers will be glad to have the information in their own magazine. Further articles in this series will, in the main, be original.*

BOWS AND FIGUREHEADS

DURING the seventeenth century, as the galleon developed into the ship, the long projecting beakhead gave way to a form of bow which ultimately became what is known as the clipper bow. The figurehead, instead of merely standing on the beakhead, became blended into the lines of the stem, and the design of the bow and figurehead became one of the most beautiful features of the ship.

H.M.S. *Prince*, illustrated at A, shows an early example of the new style of bow. The hull proper was full and apple-cheeked forward and had no flare except where it was faired into the forward corners of the squared fo'c'sle-head. The stem, or more correctly, the knee of the head, jutted out abruptly, leaving a corner on each side. The cheeks, *CH*, were strong angle brackets supporting the stem sideways. The main rails, *MR*, swept down from the forward angles of the fo'c'sle-head to frame the triangular platform which was built across the open head of the ship. This platform was supported by brackets known as head timbers, *HT*. The cat-head bracket was continued in a curve downward and forward and became one of the head rails, *HR*, Later, see B and C, a berthing rail, *BR*, was added to protect the men at work in the head.

A few years after Trafalgar, the beakhead bulk-



head which enclosed the fo'c'sle forward was discarded as being too vulnerable to gunshot, and the bows were built up to the level of the fo'c'sle-head, as shown at C and D. The cathead was lowered somewhat and the main rail, *MR*, carried straight back, thus losing the forward curve which had been such a graceful feature of the earlier ships. The figurehead was also lowered and the upward sweep of the cheeks flattened. Some years later the space between the berthing rail and the main rail was boarded up as shown at D.

It will be noted that the upper cheek terminated forward in a small scroll turned forward. This was known as the hair bracket, *HB*, and usually came just below the shoulder of the figurehead. The lower cheek ended in a much larger scroll, which turned backward. This was usually blended with the draperies of the figurehead, and persisted as long as figureheads were fitted. H.M.S. *London*, D, and a few other ships of the period, illustrate an interesting departure from this rule. In these ships the lower cheek was faired into the stem and the upper cheek formed the main scroll. The hair bracket was formed from the lower of the head rails, these being separated from the cheeks by a blank space.

In *Thermopylae*, as with most of the tea clippers, the cheeks were raised again up to the head rails and the main scroll was formed on the lower cheek. The decoration was simplified, but was in all its essentials similar to that of nearly 200 years earlier.

With the iron ship came further modifications. The cheeks and rails were unnecessary, and so disappeared. The knee of the head, which in the wooden ships projected from the stem proper, became the stem and the bow plates were faired into it with a hollow curve. The figurehead was retained and, until practically the end, a scroll reminiscent of that on the lower cheek, was formed on each side. A careful study of the diagrams and a comparison of the reference letters on the various examples will show more clearly than words the points the modeller should look for in bow decoration. Note how the steeve of angle of the bowsprit was gradually reduced, and how the figurehead followed suit, changing from an upright position to one nearly horizontal.

As for the figureheads themselves, that for H.M.S. *Prince* was a representation of Prince Rupert on horseback. Other large naval ships had the effigies of notable personalities as figureheads, often combined with allegorical figures, but until about 1750 second-rates and smaller ships used the crowned lion, often with a shield between its paws. The first figurehead for H.M.S. *Victory* was a very elaborate affair crowded with figures, but the one she carried at Trafalgar was similar to the one fitted at present, viz., a shield with crown mounted on a scroll and supported by figures on either side. Later the female figure as a figurehead became more general especially in the Merchant Service.

THE SHIP MODEL SOCIETIES *by 'Jason'*

SHIP modelling readers in general will welcome the extra space resulting from the increased quota of paper. It will certainly ease some of the Editor's problems and will help, too, in lessening some of the grumbles from readers. Which reminds me to welcome a couple of embryo magazines to our little world of ship modelling. The first is *The Thames Shiplovers and Ship Model Society (Special Publication No. 1)*. This is compiled by the honorary secretary, H. V. Evans, and deals with a lecture given by Mr. Norman Ough, at a ship model meeting on R.R.S. *Discovery* recently. With his tongue in his cheek, Mr. Ough describes it as cocoa-tin engineering which, of course, as many will agree, is very misleading. Mr. Ough is a skilled engineer, a painstaking craftsman, and an artist (in two or three dimensions) in wood, metal, or colour media. In the handling of power and heat problems for working models he has very few equals. Mr. Ough showed his model of H.M.S. *Curacoa* (still under construction) at a scale of 1 in. to 8 ft. This is a 56-in. working model and will be radio-controlled not only for simple manoeuvring, but also for gun-firing, signalling, searchlight and smoke-screen work. This not being enough, the detail work is of exhibition-stand finish and, needless to say, meticulously accurate. Reduction gearing steam turbines with steam at 40-50 lb. pressure from blowlamp firing are the main engines. As no doubt the Editor will be arranging for a special article, I'll say no more on this but those present at the lecture were fortunate in seeing, for example, the excellent work of the turbine rotors which alone were worth the journey.

"*Ahoy*" *from Sheffield.* The other magazine is the product of the Sheffield Ship Model Society under the name *Ahoy*. The Editor states quite frankly that it is "our" magazine, yet nearly half the text will make good reading for any modeller, particularly the articles on rope, timber, and warship research (modern). It must be noted that both these magazines are purely society magazines and are not comparable in scope or production with MODEL SHIPS AND POWER BOATS. But they do help their members and readers along the road to higher standards of work. The article on warship research for example, is valuable. It is by D. S. Drury. Writing of the value of photographs as a means of acquiring detailed information of a particular ship, the author warns: (a) most photographs are undated; (b) faking is sometimes resorted to, to bring them up-to-date by addition or deletion of details, or to alter a "sister" in a class by funnel bands, etc. The article goes on to say, collect all possible photographs of "your" ship and her "sisters," and assume at the beginning that they are all faked or wrongly named. A strong magnifying glass and a few nights patient examination will reveal much of value and also something nearer the truth. I'm not surprised that further articles on this subject are coming along.

Editor's Correspondence

LOSS OF THE " ROYAL GEORGE "

DEAR SIR: In the December issue of MODEL SHIPS AND POWER BOATS is a short note under the heading " The Loss of the *Royal George*," relating the tragedy as described in the little book published by S. Horsey, Portsmouth, in 1840. The various reports in this little book suggest her loss was due to the excessive heeling over to effect a repair. Cowper's well-known elegy, which brought the disaster so vividly to the attention of practically all who were at school in the latter years of last century (I for one wrote hundreds of " lines " from it !) is, in fact, entirely misleading. The real cause of the loss of this fine ship, revealed at the court martial held shortly after the sinking, but securely hidden from the public, was the rottenness of her timbers. She sank at her moorings because " some material part of her frame gave way, which can only be accounted for by the general state of decay of her timbers " reads a passage in the summing up by the officers who formed the court.

Yours faithfully,

Westcliff-on-Sea. BASIL LAVIS.

Our article was, of course, based on the popular conception of the circumstances of her loss, but as our readers will be interested to hear the real facts of the case we publish Mr. Basil Lavis's letter.

MAKING MODEL SHIPS' PROPELLERS

DEAR SIR: *Re* your recent letter to me about the design of propellers, etc., I quite agree that it is a very involved question, and that a different " prop " is required for each individual boat, but I did not ask for the design of a prop—what I require is the best method of constructing them. What I would like to see is an article on how to start to make them, so that they will be strong, and not shed their blades at high speed, or if they touch a weed or piece of driftwood.

Most of the props I have made (and I have seen dozens made by other chaps) consist of a piece of brass for the hub of the prop, two slots are sawn in it (any angle seems to do), a pair of brass blades are shaped, stuck into the slots and soldered ; if they are out of line they get a twist this way or that with a pair of pliers to make them look even. Whether the job is efficient or not does not seem to enter into their minds. At least I personally do try to balance my prop to prevent the shaft bending should the propeller come out of the water, with the engine on full throttle. I tested one chap's prop between centres, and one blade was so heavy that it fell to the bottom each time round, but he used it. The proposed article could be called " Best Methods of Constructing Small Marine Propellers, and Best Methods of Attachment." This being a *workshop* article and not an article on the design of the most efficient propeller, each reader would be left to work out this side of the job for himself to suit his own boat.

The prop being screwed on to the shaft, and a lock-nut to hold it is most crude and inefficient. I have found the prop has a way of screwing up a little extra on each run, till the lock-nut comes loose and falls off, unless one checks it each time after a run.

It must be donkey's years since such an article was last published for model engineers.

Yours faithfully,

C. PALLONZA.

Edgware, Middx.

We agree, and would welcome a clear, practical article with drawings on this subject. It must, of course, be based on the author's own experience.

Figurehead of L'Avenir *photographed at Bristol, May,* 1933.

FIGUREHEAD OF " L'AVENIR "

DEAR SIR: (1) I sailed in four-mast barque *L'Avenir* before the war.

(2) She was sold by Erikson to the Germans, later renamed *Admiral Karpfanger* and vanished without trace—or so it was said at the time—on her maiden voyage as a German training ship, somewhere off the Horn in 1935.

(3) In current issue (January, 1950) of a popular American magazine, there is an article on the island of Tristan da Cunha, and amongst the illustrations is a photograph of a ship's figurehead, stating it was from the four-mast barque *Admiral Karpfanger*.

So it rather looks as if she was wrecked on one of the Tristan Islands instead of colliding with an iceberg off the Horn. If so, was anyone saved, etc. ?

I would much appreciate any information to add to the notes about change of name, etc., which I have inscribed on an oil painting I have of *L'Avenir* which used to hang in the Mates Mess-room on board.

Yours faithfully,

Bognor Regis. C. S. COWPER-ESSEX.

This point was raised in " Sea Breezes " some years ago when it was conclusively proved that the figurehead was not that of " Admiral Karpfanger." The photograph reproduced herewith, taken at Bristol in 1933, shows the figurehead of " L'Avenir." This was in the form of scroll work with a female figure seated with a shield, which was mounted in relief on each side of the stemhead. There was no suggestion that the Germans changed the figurehead when they purchased the vessel, so we think that the story that she was lost without a trace is the correct one.

MODEL OF H.M.S. " HOOD "

DEAR SIR: On the receipt of my copy of MODEL SHIPS AND POWER BOATS today (January issue), I am somewhat surprised to see a startling inaccuracy on page 11. The photograph shown as a model of H.M.S. *Hood* is, of course, a photograph of H.M.S. *Lion* and I wonder why someone did not spot this before it went to print as it is such an obvious mistake.

Wishing you every success.

Yours faithfully,

Rochester. LT. G. FORESTER R.N. (RTD.)

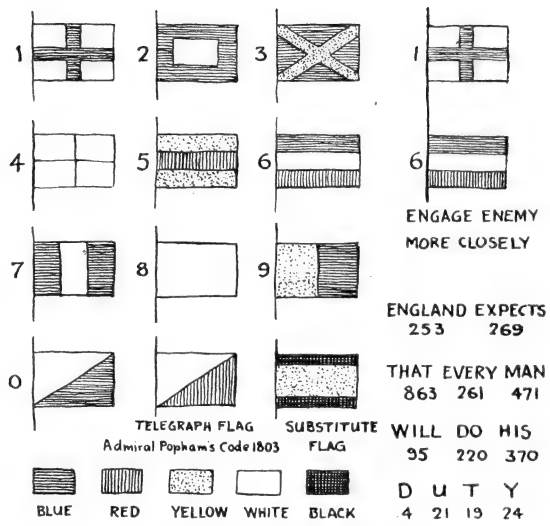
This is only one of a number of letters we have received regarding this error. We apologise to our readers and express our regret that such an obvious mistake should have been overlooked. Evidently our contributor confused his model of " Lion " with his model of " Hood." We have asked him to send an article and photograph of his " Hood " model and hope to publish it in an early issue. The models are certainly of a quality and standard that justify publicity.

NELSON'S FAMOUS SIGNAL

GENTLEMEN: Having completed a scale model of H.M.S. *Victory*, I am desirous of obtaining the correct colouring and information of the famous signal.

Yours faithfully,

Wallington, Surrey. E. D. BASSANO.



Flags for Nelson's famous signal

There would be considerable difficulty in exhibiting Nelson's famous signal on a model of H.M.S. " Victory." In the first place the signal was flown showing one word at a time and not complete as is sometimes shown on drawings, nor even as shown on special days in Trafalgar Square or on the " Victory." We consider that to show the entire message displayed at once robs a model of all dignity and accuracy.

We think a better way would be to show a model with Nelson's second, and probably his final signal, which was " Engage Enemy More Closely." This signal was flown during most of the battle whereas the more famous signal was flown for a short time only at the commencement. The flags were Nos. 1 and 6, as shown in the accompanying sketch. Nelson's flag, the St. George's Cross, would be flown at the foremast head, and the famous signal from either the main or mizzen, probably from the mizzen. The Jack would be flown on the bowsprit staff and the White Ensign from the flagstaff on the poop.

For your information we give a sketch showing the signal flags with their corresponding numbers and the flags used for the words composing Nelson's message.

TRADE TOPICS

WE HAVE RECEIVED from Messrs. Lance & Mullett, of Brighton, full particulars of their latest service to builders of model racing yachts. This consists of the provision of a complete kit of materials for building a 36 in. Restricted Class Yacht, a Marblehead, and a 10-rater. Provision is made for the building on the bread-and-butter system. The kit can be supplied in varying degrees of finish to suit the requirements of different types of builders, for instance, Stage 1 consists of the materials only ; Stage 2 provides for the kit with the hull glued up ready for shaping. In Stage 4 the hull is finished with two coats of Ripolin undercoating and three coats of best Ripolin Yacht Enamel to any colour scheme ; in Stage 6, the yacht is ready for rigging, all the necessary fittings and the first suit of sails being provided. We understand that the idea has caught on, and feel sure it will be greatly appreciated, especially by those whose facilities for the actual building of model yachts are limited either by time, tools or skill. The prices are quite reasonable, especially when one realises that the kits make up into first class racing yachts, and that a first class boat in these days is a very expensive affair. The designs are by Mr. R. Lance, well known in model yachting circles, but quotations can be given for building to customers' own designs. Their list also includes a large range of high quality hand-made model yacht fittings which will be very useful to the man who prefers to build his own boat.

News from the Clubs

THE MODEL POWER BOAT ASSOCIATION

The A.G.M. was held on January 28th at the Central Club, E.C.1, and was well attended by both London and Provincial members. The Standing Rules of the Association, having been revised by the committee, were approved by the meeting, together with several additions and amendments. It was decided to recognise a 5 c.c. speed class to be known as Class D. It is not proposed at the moment to hold special M.P.B.A. events for this new class, but they will rank for record claims, etc. It was suggested that ideas for designs for the proposed M.P.B.A. badge be requested from members of affiliated clubs. If any of these members would care to submit a suitable design it will be placed before the committee for consideration. All officers have been re-elected with the addition of J. B. Skingley, as vice-chairman. Forthcoming regattas are as follow :—

April 23rd :	North London (Victoria Park)
May 7 :	Malden
,, 21 :	Victoria or S.E. Association
,, 29 (Whit Mon.) :	Bournville

THE MODEL YACHTING ASSOCIATION

There is little news to report as all the clubs are busy planning and building for the coming season. From Hove there comes the interesting note that there is a promise of at least three racing schooners in the 10-rater class. These craft were extremely popular in the '80s and were indeed the loveliest vessels under sail that were known, except, of course, the full-rigged ships.

We would like to remind readers of the publication *M.Y.A. News*, which is issued approximately seven times a year, and costs 4s. per annum or 7d. per copy, post free. The Editor is F. C. Tansley, vice-president of the M.Y.A., and the magazine includes all items of interest to model yachting enthusiasts—official news of the clubs, regattas, official notices, information, gossip, etc.

THE THAMES SHIP MODEL SOCIETY

At a recent " Ship Model Makers' Night " on board *R.R.S. Discovery*, Mr. Norman Ough described his working model of the cruiser *Curacao*, which was available for inspection. Members who are not already acquainted with Mr. Ough's work would be well advised to visit the Imperial War Museum, S.E.1, where his latest model of the *Dorsetshire* in dry dock undergoing repairs, is on view.

The model of the *Curacoa* is to a scale of 1 in.–8 ft., giving a length of 58 in. overall. The most interesting thing about the model is that, although the hull carries a highly efficient power plant and radio control gear, which manoeuvres the vessel, fires guns, flashes signals and sends up smoke screens, the detail work is so beautifully executed that the model could take its place with showcase models and not do its builder any injustice. *Curacoa* is powered through a 5 : 1 reduction gearing by two turbines driven by steam from the water tube boiler which has a heating surface of 120 sq. in., and can provide 100 lb. sq. in. pressure. Each turbine case holds two rotors, one for ahead and one for astern working. Trials are to be run in a specially constructed tank, 6 ft. long, 10 ft. wide and 5 in. deep, which has glass panels in its sides. When completed, sometime in late spring, the model, *Curacoa*, will try its paces on the Round Pond, Kensington.

Forthcoming talks for 1950 include the subjects, " Trinity House." by W. M. Leischning, on Wednesday, March 29th, and " The Galley," by Dr. R. C. Anderson, on Wednesday, April 26th. " Ship Model Makers' Nights " are held on the second Thursday of each month.

THE RADIO CONTROLLED MODELS SOCIETY

This society was formed early in 1947 to enable those interested in the radio control of models of all kinds to make closer contact and to develop further the technique of the subject. At present, monthly meetings are held at the society's areas in Manchester (which is the headquarters), London and Birmingham. The society is holding an International Radio Controlled Models Contest at Fleetwood at Easter, at which Silver Trophies and Plaques, offered by the *Daily Dispatch*, will be competed for. Particulars of meetings and of the numerous publications dealing with the subject, can be obtained from J. Heathcote, B.Sc.Hons., 8, Hennicker Street, Swinton, Lancs.

A new group of the society has been formed in Newcastle-on-Tyne and will be known as the Tyneside Group of the Radio Controlled Models Society. The Hon. Secretary is P. W. SMITH, 27, Crossway, Jesmond, Newcastle-on-Tyne.

The A.G.M. of the London Group will be held on March 12th, and will include a talk on " 465 m/c. Technique." Further details may be obtained from the Group Secretary, LIEUT. G. CHAPMAN, Pine Corner, Heathfield, Sussex.

THE HASTINGS MODEL YACHT CLUB

The first match of the 1950 season for " M " Class yachts held recently, had, unfortunately, to be abandoned owing to very unseasonable weather. The result, decided on points lost, was : 1.—B. Phelan, *Swallow* ; 2.—R. Greenhalf, *May* ; 3.—M. Holt, *Senlac II.* It was interesting to note that the leading three models were fitted with vane steering gear.

HULL MODEL POWER BOAT CLUB

This is a newly-formed club, which already claims 18 members and a good show of boats, including two 7-footers, two trawlers and a fleet of tugs. The club hopes soon to be affiliated to the M.P.B.A. Further particulars can be obtained from the Hon. Secretary, R. D. HOBSON, 12, Westcott Street, Holderness Road, Hull.

THE READING SHIP MODEL SOCIETY

The first meeting of this society was held in January, and included an interesting illustrated talk by " Jason " on " 1,000 Years of Whaling." To the ship modeller, the most valuable part of the lecture was the series of illustrations showing the change in design of the whale ship. The lecture was concluded by a discussion of ship modelling methods. Information regarding future meetings can be had from the Secretary, D. M. REDGRAVE, 9, Westwood Row, Tilehurst, Reading.

SOUTHEND-ON-SEA MODEL POWER BOAT CLUB

Members of this club interested in radio control are anxious to hold a competition this summer and would be glad to hear from all those interested in such a project. Meetings are held within 60 yards of the sea at Thorpe Bay, and a competition held there would be a " day out " for the competitors. The lake is salt water. The club meets every Sunday, winter and summer, and some of the workshops are well worth a visit. One particularly fine model to be found there is of *King George V*, 5 ft. 2 in. long by 11 in. beam, driven by steam and complete with all details. Those interested in the competition should contact the Hon. Secretary, J. HARRISON, 10, Broadclyst Gardens, Thorpe Bay, Essex.

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All correspondence relating to sales of the paper should be addressed to THE SALES MANAGER and correspondence relating to display advertisements to THE ADVERTISEMENT MANAGER.

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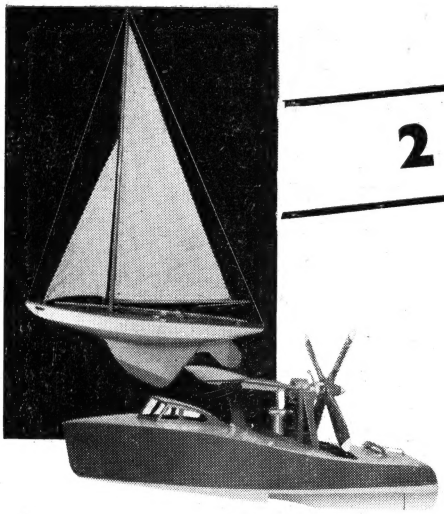

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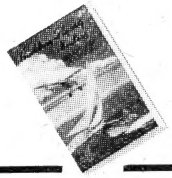

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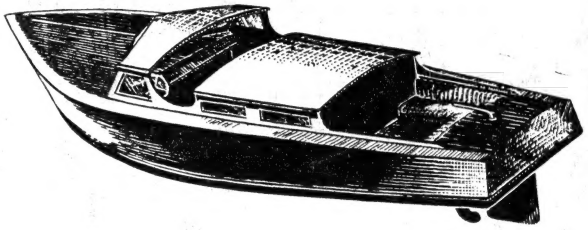

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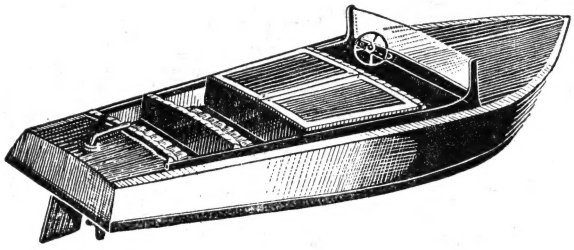

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